



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/709,759	11/09/2000	Yee S. Liaw	644-001	4751

7590 01/10/2005
Ward & Olivo
382 Springfield Avenue
Summit, NJ 07901

EXAMINER

NGUYEN, DUSTIN

ART UNIT	PAPER NUMBER
----------	--------------

2154

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/709,759

Applicant(s)

LIAW ET AL.

Examiner

Dustin Nguyen

Art Unit

2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 08/16/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 4 – 28 are presented for examination.

Claim Objections

2. Claim 7 is objected to because of the following informalities: spelling error on line 1, "on of said components". Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dickens et al. [US Patent No 6,618,774], in view of Thomas et al. [US Patent No 6,671,756].

5. As per claim 4, Dickens discloses the invention substantially as claimed including a computer switching system comprising:

a user interface device for multiplexing signals output from a connected keyboard and

Art Unit: 2154

cursor control device and for providing an interface to a video display [101, Figure 1; and col 15, lines 34-45];

switch unit coupled to said user interface device by a single first connection [100, Figure 1; and col 15, lines 7-10]; and

each of said computer interface modules coupled to at least one of said remotely located computers [103, Figure 1; and col 15, lines 21-34];

wherein video signals output from said remotely located computers are transmitted to said video display via said switch unit [104, Figure 1; and col 15, lines 34-37];

wherein said user interface device transmits signals from said keyboard and said cursor control device to said switch unit [107-111, Figure 1; and col 15, lines 28-34 and lines 55-62]; and

wherein said switch unit interprets said keyboard and said cursor control device signals, generates emulated keyboard and cursor control device signals and transmits said emulated keyboard and cursor control device signals to a select one of said remotely located computers [Figure 2; and col 17, lines 27-col 18, lines 19].

Dickens does not specifically discloses

a switch unit for enabling communication between said user interface device and a plurality of remotely located computers; and

a plurality of computer interface modules each coupled to said switch unit by a single second connection.

Thomas discloses

a switch unit for enabling communication between said user interface device and a

Art Unit: 2154

plurality of remotely located computers [2, 13, Figure 1], and

a plurality of computer interface modules each coupled to said switch unit by a single second connection [2, Figure 1; and col 27, lines 23-col 28, lines 3].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Dickens and Thomas because Thomas' teaching of plurality of remotely located computers would allow to provide the ability for system administrators to control multiple computers remotely so that maintenance time can be reduced and increase productivity.

6. As per claim 5, Dickens discloses wherein said first and second connections each comprise a series of twisted pair conducting wires [Figure 1; and col 1, lines 34-40].

7. As per claim 6, Dickens discloses wherein each component of said video signals is transmitted on one of said twisted pair conducting wires of said first and second connections, and wherein said keyboard and cursor control device signals are transmitted on a separate one of said twisted pair conducting wires [200-203, Figure 2; col 15, lines 63-66; col 16, lines 4-6; col 17 lines 19-23; and col 17, lines 29-40].

8. As per claim 7, Dickens discloses wherein a synchronization signal is transmitted with on of said components of said video signals on one of said twisted pair conducting wires [col 2, lines 9-18].

Art Unit: 2154

9. As per claim 8, Dickens discloses wherein said synchronization signal is decoded by said user interface device [i.e. signal separator] [col 24, lines 44-50].

10. As per claim 9, Dickens discloses wherein command data is transmitted with said keyboard and cursor control signals on a separate one of said twisted pair conducting wires [col 4, lines 27-36].

11. As per claim 10, Dickens discloses wherein said switch unit interprets said command data [col 17, lines 40-50].

12. As per claim 11, Dickens does not specifically disclose wherein each of said plurality of computer interface modules receives power from one of said remote computers. Thomas discloses wherein each of said plurality of computer interface modules receives power from one of said remote computers [col 4, lines 24-28]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Dickens and Thomas because Thomas' teaching would allow to power up each device whenever it is needed so that power consumption by other devices can be reduced.

13. As per claim 12, Dickens discloses wherein said user interface device comprises circuitry for amplifying said video signals [col 9, lines 46-56].

Art Unit: 2154

14. As per claim 13, Dickens discloses wherein said circuitry for amplifying said video signals analyzes a synchronization signal to determine a level of amplification [i.e. level of compensation] [col 10, lines 13-27].

15. As per claim 14, Dickens discloses wherein said circuitry for amplifying said video signals amplifies a frequency component of said video signals [col 1, lines 53-58].

16. As per claim 15, Dickens discloses wherein said level of amplification for said frequency component is determined by the shape of said synchronization signal [Figures 4a-e; and col 8, lines 57-65].

17. As per claim 16, Dickens discloses wherein said synchronization signal is a horizontal or vertical synchronization signal [col 1, lines 17-20].

18. As per claim 17, it is rejected for similar reasons as stated above in claims 1, 12-16. Furthermore, Dickens discloses encodes synchronization signals onto at least one of said components for transmission to said user station through said switch [col 26, lines 3-7].

19. As per claims 18-20, they are rejected for similar reasons as stated above in claims 11, 5, and 6.

Art Unit: 2154

20. As per claim 21, Dickens discloses synchronization signals are encoded as negative signals [col 25, lines 1-3].

21. As per claim 22, it is rejected for similar reasons as stated above in claim 16.

22. As per claim 23, Dickens discloses wherein said user station compares said synchronization signals to a signal of known shape to determine a degradation of said synchronization signals [col 9, lines 52-56].

23. As per claim 24, Dickens discloses wherein said user station amplifies said one or more frequency components of said video signals to compensate for said degradation [300-302, Figure 3; and col 18, lines 43-51].

24. As per claim 25, it is rejected for similar reasons as stated above in claims 1 and 17. Furthermore, Dickens discloses amplifying at least one frequency component of said video signals to produce tuned video signals for display at said user station [col 10, lines 24-27].

25. As per claim 26, it is rejected for similar reasons as stated above in claim 17.

26. As per claims 27 and 28, they are rejected for similar reasons as stated above in claims 13, 14 and 16.

27. Applicant's arguments with respect to claims 4-28 have been considered but are moot in view of the new ground(s) of rejection.

28. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is (571) 272-3971. The examiner can normally be reached on flex.

Art Unit: 2154

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached at (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dustin Nguyen

Examiner

Art Unit 2154

 JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100